

Work Order ID 77169

77169

U/R

Page 1

November-28-11 9:00:44 AM

Item ID: D412-702-023

Accept

N9000040100

Setup Start

NS1

Revision ID: U/R OK 11.11.28

Stop

NS2

Item Name: 5-Man Shoulder Harness, 4 point

Start Date: 28/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/12/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: M.L.S

Date: 11/11/28

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

N/A

Rev E

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D412-702-023 CHG003

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

12-6-13

12-6-12

12-6-12

12-6-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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November-28-11 9:00:44 AM

Item ID: D412-702-023

Accept

N900040100

Setup Start ***NS1***

Revision ID: U/R

Stop ***NS2***

Item Name: 5-Man Shoulder Harness, 4 point

Start Date: 28/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/12/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-702-023 Location: <u>SI</u> <u>Revi</u>								
140		0.00							
140	QC21- Final Inspection - Work Order Release								
QC	Memo	0.00							
Quality Control									

12/6/13 SD

12/6/14 SD

12-06-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November-28-11 9:00:48 AM

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Work Order ID: 77169

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Parent Item: D412-702-023

D412-702-023

Parent Item Name: 5-Man Shoulder Harness, 4 point

Start Date: 28/11/2011

Required Date: 12/12/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B Removed Manufacturing 05-11-08 JLM
 IPP Rev:C06.04.03As per DSI9324 JLM
 IPP rev D 06.12.14 per ecn 871 EC
 IPP Rev:E 07-03-14 As per DSI 9351 JLM IPP
 Rev.F 11.05.31 DSI 9559 EC verified by: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4-13A *AN4-13A* Bolt		Purchased	No			120	Each	953.0000	4	4			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST357				953					
				118078				17					
				118838				436					
				119449				500					
D3195-041 *D3195-041* Bracket Assembly		Manufactured	No			120	Each	2.0000	2	2			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST246A				2					
				74611				2					
D3195-043 *D3195-043* Bracket Assembly		Manufactured	No			120	Each	3.0000	2	2			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST				3					
				74612				3					

M120770 SP

B82351 SP

B82332 SP
 SP 12-6-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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November-28-11 9:00:48 AM

Page 2

Work Order ID: 77169

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Parent Item: D412-702-023

D412-702-023

Parent Item Name: 5-Man Shoulder Harness, 4 point

Start Date: 28/11/2011

Required Date: 12/12/2011

Start Qty: 1.00

Required Qty: 1.00

D3196-1

Manufactured No

120 Each

6.0000

D3196-1

Bar

**

1

B 815 33 SP.

Location

Loc Qty

Loc Code

ST260

6

74779

6

Manufactured No

120 Each

4.0000

D3197-041

D3197-041

Bar Assembly

**

2

B 846006. SP.

Location

Loc Qty

Loc Code

ST260

4

74548

4

Manufactured No

120 Each

26.0000

D3268-1

D3268-1

Placard

**

2

B 83225 SP

Location

Loc Qty

Loc Code

ST246A

26

74613

6

76058

20

Manufactured No

120 Each

22.0000

D3546-1

D3546-1

Clip

**

2

SP 12-6-12

Location

Loc Qty

Loc Code

ST245

22

73444

22

2x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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November-28-11 9:00:48 AM

Work Order ID: 77169

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Parent Item: D412-702-023

D412-702-023

Parent Item Name: 5-Man Shoulder Harness, 4 point

Start Date: 28/11/2011

Required Date: 12/12/2011

Start Qty: 1.00

Required Qty: 1.00

D3551-11

Manufactured No

120 Each

52.0000

5

D3551-11

Hook and Loop Tie

**

381879 SP.

Location

Loc Qty

Loc Code

ST245

12

75001

12

ST246A

40

76057

40

D412-702-069

Manufactured No

120 Each

6.0000

1

D412-702-069

Grommet

**

382596 SP.

Location

Loc Qty

Loc Code

FG125

6

74080

6

D4387-041

Manufactured No

120 Each

12.0000

5

D4387-041

Harness Assembly

**

384109 SP.

Location

Loc Qty

Loc Code

quar

5

72273

5

ST263

7

75271

7

MS24694-S162

Purchased No

120 Each

81.0000

2

MS24694-S152

Screw

**

M121444 SP.
12-6-12.

Location

Loc Qty

Loc Code

ST290

81

116440

1

119108

80

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November-28-11 9:00:49 AM

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Work Order ID: 77169

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Parent Item: D412-702-023

D412-702-023

Parent Item Name: 5-Man Shoulder Harness, 4 point

Start Date: 28/11/2011

Required Date: 12/12/2011

Start Qty: 1.00

Required Qty: 1.00

MS24694-S154

Purchased

No

120

Each

70.0000

MS24694-S154

SCREW

**

Location

Loc Qty

Loc Code

ST290

70

119022

70

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -021	QTY -023	QTY -025	QTY -027	QTY -029	QTY -035	Part Number	Description
X						D412-702-021	Dart 13-Man Shoulder Harness Kit, 4-point
	X					D412-702-023	Dart 5-Man Forward Facing Shoulder Harness Kit, 4-point
		X				D412-702-025	Dart 4-Man Aft Facing Shoulder Harness Kit, 4-point
			X			D412-702-027	Dart 4-Man Side Facing Shoulder Harness Kit, 4-point
				X		D412-702-029	Dart 1-Man Forward Facing Shoulder Harness Kit, 4-point
					X	D214-702-035	Dart 5-Man Aft Facing Shoulder Harness Kit, 4-point, for Bell 214B/B-1
1	1		1	1		D412-702-069	GROMMET KIT
2	2					D3195-041	BRACKET
2	2					D3195-043	BRACKET
1	1			1		D3196-1	BAR
1			1			D3196-3	BAR
1			1			D3196-4	BAR
2	2					D3197-041	BAR
4		4				D3198-1	FITTING
2	2					D3268-1	PLACARD
9	5		4	1		D3446-041	HARNESS ASSEMBLY, 4 POINT
4		4				D3446-043	HARNESS ASSEMBLY, 4 POINT
					5	D3446-045	HARNESS ASSEMBLY, 4 POINT
13	5	4	4	1	5	D3551-11	HOOK AND LOOP TIE
2	2					D3546-1	CLIP
4		4				AN4-5A	BOLT
4	4					AN4-13A	BOLT
8		8				AN4-20A	BOLT
20		20				AN960JD416	WASHER (OR NAS1149D0463J)
12		12				MS21042L4	NUT (OR MS21042-4)
8	2		6	2		MS24694-S152	SCREW
8	2		6	2		MS24694-S154	SCREW

QTY -069	Part Number	Description
X	D412-702-069	GROMMET KIT
24	D3619-2	GROMMET
1	D3619-2T1	HOLE PUNCH
1	D3619-2T2	STRIKER BLOCK
1	D3619-2T3	PUNCH
1	D3619-2T4	DIE

REFERENCE ONLY

DART SERVICE INSTRUCTION

TO AMEND IIN-D412-702-1 REV. A,
AND ICA-D412-702 REV. 4 OR EARLIER APPROVED REVISIONS
REF. TCCA STC: SH04-7
REF. FAA STC: SR01997NY
REF. EASA STC: EASA.IM.R.S.00710

PURPOSE

The purpose of this DSI is to outline the replacement of existing D3446-041/-043 Shoulder Harnesses with the new and improved D4387-041/-043 Shoulder Harnesses.

CHANGE

For the following Kits, the D4387-041 and D4387-043 Shoulder Harnesses respectively replace the D3446-041 and D3446-043 Shoulder Harnesses as follows:

Old Harness P/N	Used On	New Harness P/N	Effectivity
D3446-041	D412-702-021	D4387-041	CHG 003 and subsequent
	D412-702-023		CHG 002 and subsequent
	D412-702-027		
	D412-702-029		
D3446-043	D412-702-021	D4387-043	CHG 003 and subsequent
	D412-702-025		CHG 002 and subsequent






Customers who want to upgrade their shoulder harnesses may replace their existing D3446-041/-043 with D4387-041/-043 per this service instruction.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 11.05.09
CERT. NO.: SH04-7
ISSUE NO.: 3

A	NEW ISSUE	MB	11.05.09
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9559	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		HARNESS CHANGE	NTS
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